

Environmental Profile

This LCA is calculated according to: ISO 14044, ISO 14040 and EN 15804

Ecochain v3.5.80



Product: 3003189 - Wadal PVC Tee 45° GY 125x110 S/S/S
Unit: 1 piece
Manufacturer: Wavin - NL - Hardenberg - Verified
Address: J.C. Kellerlaan 3
7772 SG Hardenberg
Netherlands

LCA standard: NMD Bepalingsmethode 1.1 (2022)
Standard database: Worldwide - Ecoinvent v 3.6 Cut-Off
Externally verified: Yes
Issue date: 08-06-2023
End of validity: 08-06-2028
Verifier: Martijn van Hövell - SGS Search



With Wadal you opt for a tensile-resistant system whose connections cannot slide apart. There is a solution for every indoor drainage situation, thanks to the very extensive range of PVC adhesive fittings and pipes. KOMO certified.

This LCA was evaluated according to EN15804+A2. It was concluded that the LCA complies with this standard.

The LCA background information and project dossier have been registered in the online Ecochain application in the account Wavin - NL - Hardenberg - Verified (2020). (☑ = module declared, MND = module not declared).

A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
☑	☑	☑	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	☑	☑	☑	☑
Product stage					Use stage							End-of-Life stage				
A1 Raw material supply A2 Transport A3 Manufacturing					B1 Use B2 Maintenance B3 Repair B4 Replacement B5 Refurbishment B6 Operational energy use B7 Operational water use							C1 De-construction demolition C2 Transport C3 Waste processing C4 Disposal				
Construction process stage												Benefits and loads beyond the system boundaries				
A4 Transport gate to site A5 Assembly / Construction installation process												D Reuse- Recovery- Recycling- potential				

Environmental impacts and parameters

ECI = Environmental Costs Indicator [euro]; **ADPE** = Abiotic depletion potential for non-fossil resources [kg Sb-eq]; **ADPF** = Abiotic depletion potential for fossil resources [kg Sb-eq]; **GWP** = Global warming potential [kg CO2-eq]; **ODP** = Depletion potential of the stratospheric ozone layer [kg CFC-11-eq]; **POCP** = Formation potential of tropospheric ozone photochemical oxidants [kg ethene-eq]; **AP** = Acidification potential of land and water [kg SO2-eq]; **EP** = Eutrophication potential [kg PO4 3--eq]; **HTP** = Human toxicity potential [kg 1,4-DB-eq]; **FAETP** = Freshwater aquatic ecotoxicity potential [kg 1,4-DB-eq]; **MAETP** = Marine aquatic ecotoxicity potential [kg 1,4-DB-eq]; **TETP** = Terrestrial ecotoxicity potential [kg 1,4-DB-eq]; **GWP-total** = EF EN15804+A2 Climate Change [kg CO2 eq]; **GWP-f** = EF Climate change - Fossil [kg CO2 eq]; **GWP-b** = EF EN15804+A2 Climate Change - Biogenic [kg CO2 eq]; **GWP-luluc** = EF EN15804+A2 Climate Change - Land use and LU change [kg CO2 eq]; **ODP** = EF Ozone depletion [kg CFC11 eq]; **AP** = EF Acidification [mol H+ eq]; **EP-fw** = EF Eutrophication, freshwater [kg P eq]; **EP-m** = EF Eutrophication, marine [kg N eq]; **EP-T** = EF Eutrophication, terrestrial [mol N eq]; **POCP** = EF Photochemical ozone formation [kg NMVOC eq]; **ADP-mm** = EF Resource use, minerals and metals [kg Sb eq]; **ADP-f** = EF Resource use, fossils [MJ]; **WDP** = EF Water use [m3 depriv.]; **PM** = EF Particulate matter [disease inc.]; **IR** = EF Ionising radiation [kBq U-235 eq]; **ETP-fw** = EF Ecotoxicity, freshwater [CTUe]; **HTP-c** = EF Human toxicity, cancer [CTUh]; **HTP-nc** = EF Human toxicity, non-cancer [CTUh]; **SQP** = EF Land use [Pt]; **PERE** = Use of renewable primary energy excluding renewable primary energy resources used as raw materials [MJ]; **PERM** = Use of renewable primary energy resources used as raw materials [MJ]; **PERT** = Total use of renewable primary energy resources [MJ]; **PENRE** = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials [MJ]; **PENRM** = Use of non-renewable primary energy resources used as raw materials [MJ]; **PENRT** = Total use of non-renewable primary energy resources [MJ]; **PET** = Total energy [MJ]; **SM** = Use of secondary material [kg]; **RSF** = Use of renewable secondary fuels [MJ]; **NRSF** = Use of non-renewable secondary fuels [MJ]; **FW** = Use of net fresh water [m3]; **HWD** = Hazardous waste disposed [kg]; **NHWD** = Non-hazardous waste disposed [kg]; **RWD** = Radioactive waste disposed [kg]; **CRU** = Components for re-use [kg]; **MFR** = Materials for recycling [kg]; **MER** = Materials for energy recovery [kg]; **EE** = Exported energy [MJ]; **EET** = Exported energy thermic [MJ]; **EEE** = Exported energy electric [MJ]

Statement of Confidentiality

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Results

Environmental impact SBK set 1	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
ECI	euro	0.16	0	0.01	0.17	0	0.05	0	-0.08	0.15
ADPE	kg Sb-eq	1.46E-3	5.17E-7	2.25E-6	1.46E-3	4.78E-7	4.37E-6	5.34E-9	-1.67E-5	1.45E-3
ADPF	kg Sb-eq	1.71E-2	1.49E-4	3.87E-4	1.77E-2	1.35E-4	1.51E-3	7.39E-6	-9.40E-3	9.91E-3
GWP	kg CO2-eq	1.44E+0	2.03E-2	7.33E-2	1.54E+0	1.83E-2	5.12E-1	5.03E-3	-8.11E-1	1.26E+0
ODP	kg CFC-11-eq	8.07E-7	3.59E-9	5.80E-9	8.17E-7	3.40E-9	6.31E-8	1.76E-10	-4.08E-7	4.76E-7
POCP	kg ethene-eq	8.23E-4	1.22E-5	3.19E-5	8.67E-4	1.10E-5	1.20E-4	1.31E-6	-4.23E-4	5.76E-4
AP	kg SO2-eq	5.78E-3	8.90E-5	3.15E-4	6.18E-3	7.89E-5	8.80E-4	3.98E-6	-2.80E-3	4.35E-3
EP	kg PO4 3--eq	7.52E-4	1.75E-5	4.05E-5	8.11E-4	1.58E-5	1.34E-4	1.57E-6	-3.87E-4	5.74E-4
HTP	kg 1,4-DB-eq	5.63E-1	8.53E-3	3.41E-2	6.06E-1	7.84E-3	2.29E-1	4.18E-4	-2.66E-1	5.77E-1
FAETP	kg 1,4-DB-eq	1.75E-2	2.49E-4	1.16E-3	1.89E-2	2.30E-4	3.49E-3	1.29E-4	-7.78E-3	1.49E-2
MAETP	kg 1,4-DB-eq	3.98E+1	8.95E-1	4.59E+0	4.53E+1	8.20E-1	1.21E+1	1.57E-1	-1.72E+1	4.12E+1
TETP	kg 1,4-DB-eq	4.20E-3	3.01E-5	2.53E-3	6.76E-3	2.78E-5	8.13E-4	1.41E-6	-2.60E-3	5.00E-3
Environmental impact	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
GWP-total	kg CO2 eq	1.49E+0	2.04E-2	8.39E-2	1.60E+0	1.85E-2	5.54E-1	5.87E-3	-7.48E-1	1.43E+0
GWP-f	kg CO2 eq	1.47E+0	2.04E-2	6.45E-2	1.56E+0	1.85E-2	5.16E-1	5.86E-3	-8.28E-1	1.27E+0
GWP-b	kg CO2 eq	1.48E-2	9.43E-6	1.33E-2	2.81E-2	1.12E-5	3.76E-2	7.41E-6	8.18E-2	1.48E-1
GWP-luluc	kg CO2 eq	1.73E-3	7.48E-6	6.12E-3	7.87E-3	6.54E-6	2.34E-4	1.54E-7	-1.12E-3	6.99E-3
ODP	kg CFC11 eq	7.97E-7	4.51E-9	6.82E-9	8.08E-7	4.26E-9	6.50E-8	2.19E-10	-4.03E-7	4.74E-7
AP	mol H+ eq	7.05E-3	1.18E-4	3.93E-4	7.56E-3	1.05E-4	1.10E-3	5.33E-6	-3.39E-3	5.38E-3
EP-fw	kg P eq	7.17E-5	2.06E-7	1.13E-6	7.31E-5	1.52E-7	7.84E-6	6.97E-9	-3.67E-5	4.44E-5
EP-m	kg N eq	1.28E-3	4.17E-5	9.29E-5	1.41E-3	3.77E-5	2.71E-4	3.30E-6	-6.09E-4	1.11E-3
EP-T	mol N eq	1.37E-2	4.60E-4	1.02E-3	1.52E-2	4.15E-4	2.98E-3	2.12E-5	-6.57E-3	1.20E-2
POCP	kg NMVOC eq	4.36E-3	1.31E-4	2.92E-4	4.78E-3	1.19E-4	8.93E-4	7.31E-6	-2.17E-3	3.63E-3
ADP-mm	kg Sb eq	1.46E-3	5.17E-7	2.25E-6	1.46E-3	4.78E-7	4.37E-6	5.34E-9	-1.67E-5	1.45E-3
ADP-f	MJ	3.65E+1	3.08E-1	7.21E-1	3.75E+1	2.84E-1	2.98E+0	1.60E-2	-1.98E+1	2.10E+1
WDP	m3 depriv.	2.41E+0	1.10E-3	5.58E-1	2.97E+0	8.70E-4	1.18E-1	1.04E-4	-1.26E+0	1.83E+0
PM	disease inc.	4.82E-8	1.83E-9	4.86E-9	5.49E-8	1.67E-9	1.37E-8	1.10E-10	-2.71E-8	4.33E-8
IR	kBq U-235 eq	8.38E-2	1.29E-3	1.15E-3	8.63E-2	1.24E-3	1.06E-2	7.35E-5	-4.21E-2	5.61E-2
ETP-fw	CTUe	4.66E+1	2.75E-1	1.67E+0	4.86E+1	2.30E-1	2.31E+1	2.55E-1	-1.75E+1	5.47E+1
HTP-c	CTUh	1.22E-9	8.91E-12	5.80E-11	1.29E-9	8.20E-12	3.31E-10	4.42E-13	-4.68E-10	1.16E-9
HTP-nc	CTUh	4.03E-8	3.00E-10	1.81E-9	4.24E-8	2.75E-10	8.01E-9	4.89E-11	-1.62E-8	3.45E-8
SQP	Pt	8.23E+0	2.67E-1	5.39E-2	8.55E+0	2.43E-1	1.81E+0	4.10E-2	-1.77E+1	-7.02E+0

Resource use	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
PERE	MJ	2.54E+0	3.86E-3	3.51E+0	6.05E+0	4.07E-3	2.15E-1	5.97E-4	-3.66E+0	2.60E+0
PERM	MJ	0	0	0	0	0	0	0	0	0
PERT	MJ	2.54E+0	3.86E-3	3.51E+0	6.05E+0	4.07E-3	2.15E-1	5.97E-4	-3.66E+0	2.60E+0
PENRE	MJ	3.92E+1	3.27E-1	7.80E-1	4.03E+1	3.01E-1	3.17E+0	1.70E-2	-2.14E+1	2.24E+1
PENRM	MJ	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.92E+1	3.27E-1	7.80E-1	4.03E+1	3.01E-1	3.17E+0	1.70E-2	-2.14E+1	2.24E+1
PET	MJ	4.17E+1	3.31E-1	4.29E+0	4.63E+1	3.05E-1	3.38E+0	1.76E-2	-2.50E+1	2.50E+1
SM	kg	0	0	0	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0
FW	m3	2.72E-2	3.75E-5	1.32E-2	4.04E-2	3.21E-5	3.22E-3	1.96E-5	-1.51E-2	2.86E-2
Output flows and waste categories	Unit	A1	A2	A3	A1-A3	C2	C3	C4	D	Total
HWD	kg	2.09E-4	7.81E-7	7.66E-7	2.11E-4	7.25E-7	4.88E-6	1.95E-8	-1.69E-5	2.00E-4
NHWD	kg	1.55E-1	1.95E-2	1.18E-3	1.76E-1	1.76E-2	1.07E-1	7.03E-2	-6.75E-2	3.03E-1
RWD	kg	7.29E-5	2.02E-6	1.42E-6	7.64E-5	1.93E-6	1.13E-5	1.04E-7	-3.75E-5	5.23E-5
CRU	kg	0	0	0	0	0	0	0	0	0
MFR	kg	0	0	0	0	0	0	0	0	0
MER	kg	0	0	0	0	0	0	0	0	0
EE	MJ	0	0	0	0	0	0	0	0	0
EET	MJ	0	0	0	0	0	0	0	0	0
EEE	MJ	0	0	0	0	0	0	0	0	0



Ecochain Technologies BV
H.J.E. Wenckebachweg 123, 1096 AM Amsterdam, The Netherlands
<https://www.ecochain.com>
+31 20 3035 777